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ABSTRACT

Three papers by the same author address: (1) educational methods for gifted children in the regular classroom; (2) principles of enriching the gifted child's development in the home; and (3) modifying lessons to optimally challenge gifted students. The first paper is titled, "Classrooms with Growing Room." It stresses the need for gifted children in regular classes to be provided with learning tasks that are beyond their actual level of development, in the "zone of proximal development." Principles of modifying lessons to meet individual student needs are suggested which are consistent with the changing roles of the teacher and the learner suggested by the current educational reform movements. The second paper is titled, "Playing Smart: Enrichment in the Home." This paper offers nine characteristics of activities which foster learning. These include interaction with a more able individual, making choices, open-endedness, multiple levels of difficulty, opportunities to learn from mistakes, and reflection time and talk. A list of suggested materials is attached. The third paper is titled, "Lessons without Limits" and describes a method of using observational student data to differentiate regular lessons and expand the student's learning beyond the core objective. (DB)

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Classrooms with Growing Room

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Playing Smart: Enrichment in the Home

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Lessons Without Limits

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Classrooms with Growing Room

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Note: A more extensive version of the comments in this paper can be found in the Fall, 1992 issue of *AGATE, Volume 6, No. 2* (Journal of the Gifted and Talented Education Council of The Alberta Teachers' Association).

One of the many images in transition in education is our conception of good education. Rather than searching for the "right way" to educate all students, we are becoming increasingly aware that education is not a "one-size-fits-all" enterprise. The education system needs to offer a range of sizes and styles to accommodate individual differences in sizes and growth rates. Parents often purchase clothes for their children with room to "grow into". They expect the next growth spurt, and the next.... Educators also monitor and plan for growth. However a gifted student is only one in a class of twenty-five or thirty students who are often expected to share a limited wardrobe of resources and curricular activities. That is all the administration and the teacher feel they are prepared or can afford to provide. For some the clothes will be so large, they stumble over them. For others, the clothes will be an appropriate fit and the student will move comfortably through the tasks provided. And then, there are the students who have already outgrown all or parts of the wardrobe. In addition, they may find the contents dull, or the styles not to their taste. The metaphor could be extended endlessly. The gifted student needs a curriculum with more room to grow than is often provided in traditional materials and instructional strategies that dominate current practice.

Schools should offer all students activities and an environment that not only expects growth to occur naturally, but encourages it. This means providing tasks with high ceilings, or no ceilings, broad scope, and coherent sequence. In addition, the activities should encourage students to build connections between facts, concepts principles and generalizations in one subject area to those in other areas, and an understanding of when, how and why to use knowledge gained in one setting or on one type of task to other settings and other types of tasks. We have a prime opportunity to take advantage of the educational reform movement and recent research on learning and the psychology of development in our efforts to provide gifted students with good education.

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It has become apparent that in our efforts to create comfortable learning environments and materials we may have reduced the opportunities to develop higher level intellectual skills. In the past, teachers were trained to offer students lessons they would be able to complete quietly and independently at their desks. The lessons were a "good fit" for the child's current level of development. Now, it seems that for thinking skills to develop, an individual must be put in the uncomfortable position of finding their current skills inadequate. They need to be challenged with tasks they cannot complete without interacting with peers or a teacher. This motivates the learner to find a new and better way to develop a more sophisticated way of thinking to meet the challenge. The extent to which children benefit from tasks beyond their actual level of development, into their "zone of proximal development", varies with the individual's learning or intellectual ability (Vygotsky, 1978). The brighter the student, the broader the zone of proximal development. It is the cognitive psychologist's equivalent of "growing room". It is the range of tasks beyond those that a child is able to complete alone that a child can learn, with assistance, to perform independently. These are tasks in which the child should be engaged in order to promote the growth of new and more sophisticated intellectual skills.

This approach to learning has huge implications for current conceptions of what classrooms should look like, sound like, contain, and how they should operate. Instead of orderly rows of silent students with their heads bowed, pencils in hand, recording answers to questions from the end of the chapter on ecology, we are seeing noisy groups of children planning and implementing studies of the impact of litter on the neighborhood environment. What they don't know how to do, they ask to learn. They are engaged, they are excited! These experiences can and should be offered to all learners in the regular classroom.

There are special benefits for the bright, gifted, talented and creative students in this vision. Having the greatest ability to grow, they are the students who have suffered the most from the low task ceilings, restricted range of activities and the passive learning environment.

Many advocates for special programs for gifted students assess the outcome of their efforts by counting the number of pull-out programs operating in their school district(s). Recent fiscal restraints and inclusive education policies have reduced the number of these programs. Lurking in what appears to be a grim trend is a shining opportunity for regular classroom educators to meet the needs and nurture the abilities of gifted children in every school day, rather than expecting their needs to be met by another teacher, in another room, one day each week.

Admittedly, attempting to provide growth promoting challenges in the regular classroom brings its own set obstacles. They are not simple problems, therefore simple answers will not suffice. Maker (1982) proposed a system for developing curriculum appropriate for gifted learners which is based on the behaviors each individual demonstrates as he or she is engaged in learning activities in their areas of interest and strength. The principles she describes for curriculum development can also be used to guide the modification of regular classroom lessons to provide more growing room in them at no cost to the school or teacher. In addition, they are consistent with the changing roles of the teacher and the learner suggested by current educational reform movements. Maker's principles can also assist efforts to nurture the development of self-directed, self-monitoring, independent, lifelong learners with flexible knowledge bases that can be applied and generalized in a number of settings within and beyond schools.

Knowing that some educators will challenge bright students and others will not, it is critical that those who do will make some effort to equip those students with some goal-setting, self-monitoring and negotiating techniques that will enable them to take some initiative when they begin to feel boredom creeping in. As an example, a teacher desiring to arm students against boredom could introduce what Maker (1982) called "freedom of choice" into plans for one or more students. This might be done by offering students the opportunity to develop independent study contracts. The teacher would let the students choose or propose the topic as a group or as individuals rather than suggesting or selecting it; engage the students in a discussion to determine the size and duration of the activity; monitor progress together, require self- and group evaluation as well as offering feedback from the teacher's perspective; talk about how to set goals, select topics determine how much time to allow for certain tasks, how to select criteria for evaluation and be a fair judge of a piece of work. In the future, with other teachers, a student may consider proposing an independent study contract when their assigned work is less than challenging. This action is a much more attractive alternative than some others, such as underachievement, disruptive outbursts, withdrawal, etc.

All children need to develop these skills, however they take on an additional degree of importance when self-regulated learning becomes a student's best defense against boredom. With some knowledge of how to manage their own learning, they can take the initiative when the classroom offers less than enough. There is so much more to learn than is reflected in the curriculum that is foolish to let students grow up with the impression that they will learn all they need to know in school. Instead they should be encouraged to learn how to learn for the rest of their lives.

In closing, a final transition will be suggested. In the midst of the curriculum revision suggested, yet another golden opportunity exists. Much of the literature advocating for special services for gifted children demands that their needs be met. I would look beyond the

goal of simply meeting any student's needs to promoting optimal development of potential. "Meeting needs" has a ring of minimal satisfaction. With a shift in perspective toward optimal development as a goal of education, students will be able to explore their growing room, and that of their classmates. New "gifts" will emerge and be shared. These bold suggestions will take commitment and time but they can be initiated on a small scale and on an individual basis. But nothing will happen unless we each commit to exploring the limits of our own potential to optimize our ability to challenge all learners in search of gifts.

References

Maker, C. J. (1982). Curriculum development for the gifted. Rockville, MD: Aspen.

Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.

Content Modifications	**Process Modifications**
adjust the content of the lesson to take advantage of the bright student's ability to build a richer, more diverse, flexible, efficiently organized knowledge base. Types: Abstractness Complexity Variety Study of People Methods of Inquiry	adjust the manner in which thinking, or feeling play a role in the learning in order to take advantage of the extraordinary information processing capabilities of these students. Types: Higher levels of thinking Open-endedness Debriefing/Proof of Reasoning Freedom of Choice Group Interaction Pace Variety
Product Modifications	**Learning Environment Modifications**
adjust the outcome of an activity, the manner in which it is shared and/or evaluated. These modifications provide bright students with an opportunity to manifest their abilities in a product that reflects their potential to produce and contribute, rather than their potential to consume what has been produced by others. Types: Real Problem Real Audience Transformation Evaluation	adjust the nature of the setting and materials in order to amplify the benefits to be gained from the other modifications. They also increase the similarity between the tasks and settings in the learning environment and those that students are expected to encounter in the real world to promote transfer. Types: Student-centred Independence Openness Acceptance Complexity High Mobility

Table 1. Definitions of, rationales for and types of lesson modification strategies.

Playing Smart: Enrichment in the Home

Lannie Kanevsky
Simon Fraser University

Children don't need to learn while they play, but they often do learn, incidentally or accidentally. Knowing this, a parent can take the opportunity to nurture the child's development. This opportunity, however, should not be abused as play also offers the children time to practice skills and enrich connections between new knowledge and old. Keep it fun! Children should be encouraged to play with individuals who are younger and older, more and less skilled. One thing is certain, smart people are always learning from those around them. This is an orientation that can be reinforced throughout childhood.

Vygotsky's (1978) theory of the development of higher intellectual processes is based on his belief that "good learning is in advance of current levels of development". He also proposed that this development is the result of the progressive internalization of what a child experiences first in social interaction with a more able person. The more able individual may be younger, older, or of the same age. She is simply more knowledgeable about the task at hand. Most parents and teachers have observed this phenomenon in action. The adult completes a task with the child, sharing the activity and talking their way through it. Later, when attempting the task independently, the child may be heard talking to herself, reciting the parent's word verbatim. This is simply an example of the child having internalized the words of the more able adult in her efforts to master the task independently. Later the child will hear the words in her mind, without needing to speak them. Finally, the skill will become automatic and no speech will be needed, silent or spoken, to facilitate task completion.

This process has been described in order to contextualize the type of play to be encouraged in this workshop. It is play that initially occurs in a social context, not independent play. Playing "smart" is a phrase I use to capture the kind of play that initiates and promotes the development of the flexible, fluent thinking when children are faced with new challenges. This includes a willingness to accept the challenge, to relish the opportunity to be wrong, to learn from mistakes, and to experience failure in a safe environment. Often bright children are praised only when they are "right" and come to feel they are only valued when they can produce the right answer. Right answers have their place, but so do mistakes and dead end solutions. The latter can show us what doesn't work so we don't take that path again. They force good problem solvers to generate alternative solutions, the test them, to evaluate their efficiency, and worthiness.

As a child's first teachers, parents are powerful models for behaviors and attitudes related to the kind of learning that emerges from situations where current ways of thinking and levels of skill are not sufficient. New ideas must be generated and tested. When engaging in play with their children, parents must keep the child's primary goal for play in mind—FUN! Beware of turning play into work, or school. Turn work and school into fun, but don't take the fun out of play. As was stated in the opening, children can and do learn while playing, but they don't always need to learn from play.

The characteristics of "smart" play activities will be described in the next section. The list is not exhaustive. It is intended to focus attention on the features of activities that promote the development of skills and attitudes that are of critical importance to an orientation towards learning as a lifelong endeavor. It can happen anywhere, anytime. It can involve being right, or wrong, or a bit of both. Sometimes the result of one's efforts can be seen immediately; in other situations we're left waiting for an indication of the outcome for an indefinite period of time. The reading will close with a list of materials that parents might consider when looking for productive play activities.

Characteristics of Smart Activities

1. Interaction with a more able individual

The need for someone to talk to when one wants a child to learn something new from a challenging activity was described earlier. When playing, the social dynamics of the situation may overwhelm the potential for intellectual benefits so the nature of the interaction must also be considered. Will the children attempt to teach each other, cooperate or compete? All children are sensitive to the competitive context of many play activities. Both competition and cooperation have their place in the real world. Although it is necessary for children to learn to compete, to lose and to win, cooperative activities often provide a safer environment for the risk-taking involved in testing new knowledge. These dynamics may emerge when the child is playing with a peer, sibling or an adult. Observe the differences in the benefits when it happens in your own home.

2. Choices

All children, and bright children in particular, are capable of making decisions. Often adults underestimate this ability. Children can and should suggest and choose activities, how to play, where to play, alternative ways to do something.

Young children and older, inexperienced decision-makers can be given two options to choose from initially. Then the list can be expanded to three. Eventually they can be offered three or four and the opportunity to suggest their own idea. When offering children the opportunity to choose or suggest, a parent must be prepared to allow the child to pursue the choice. Don't offer control and then attempt to coerce the child to change because "you know better". Let your children try and fail rather than protecting them from a struggle. As long as they will not be harmed, they may emerge with an unexpected but valuable lesson from a less than optimal choice.

3. Open-endendness

Look for activities with more than one right answer, more than one solution, more than one way of anything. This extends the life of a toy or activity. Bright children bore quickly when the activity has a limited number of challenges and solutions.

4. Multiple levels of difficulty

Does the activity grow with the child's skill? This may be the most addictive feature of Nintendo games. A player can only progress to a certain level with one strategy. Eventually, a player must develop a new strategy and learn when to use the old or the new. The rewards are immediate—the point totals climb. As players learn when and how to use new strategies they also move on to higher levels and accumulate points. This is a prime example of growing room in a game. Nintendo is not the only example. Chess is another. It too can be successfully played at a number of levels of complexity. These tasks require a basic understanding of the rules, but have a "high ceiling" as children can develop more and more sophisticated skills with time, practice and interaction with more able players.

5. Complexity

Smart activities involve rich, confusing, messy understandings. There are an infinite number of connections between knowledge gained from the play activity and other experiences are numerous and diverse. Many parents are astounded by the richness of the imaginary world that exists in their backyard when they interrupt a fantasy adventure game involving two or more children. In this context children develop and honor laws, maintain and expand their characters over days and weeks. Simply managing the complexity of what is involved in the play activity is a challenge the child can learn from and monitor.

6. Luck or chance factor

We live in an unpredictable world. Like many challenges children will experience in their lives, when luck is involved, intellectual ability loses its position of dominance in determining success. When playing with siblings or peers of different ages, a chance factor adds unpredictability to the outcome that defies age, knowledge or skill. Therefore, a younger child might win without experience or skill.

7. Opportunities to learn from mistakes

Mistakes are just another way of doing something. Many bright children have limited experience making and understanding mistakes as they are less often offered opportunities to be wrong. Age-appropriate puzzles and problems are no challenge. Parents often look for games children will enjoy immediately, rather than those that take time to learn and understand, and provide prime opportunities for blundering. Mistakes are a great indicator of growing room and increase the need for models who are also willing to try, to be wrong, and to grow from the experience.

8. Reflection time and talk

During and after a challenging activity, reflect; talk about the "how". How are you thinking about it? What did you learn? Are you improving? What other ways could you have done it but you didn't? Why didn't you? How did you remember the rules? How do you remember all of the strategies that didn't work so you don't repeat your mistakes? Give this kind of talk real time. A rough guideline would be to spend two-thirds of the time playing and one-third describing your thinking and asking the child to describe his or hers. Children under the age of 7 may not be able to discuss their thoughts as they "just happen", but older children will often enjoy hearing how others minds work and comparing it to their own.

9. A smorgasbord of thinking and feeling opportunities

Children should be offered a variety of smart activities that encourage the development of all kinds of thinking. Activities can involve fantasy, problem-solving, deductive thinking, logic, divergent thinking, evaluation, planning and many more kinds of thinking and feeling. Children should be encouraged to explore

them all rather than honing a single set of thinking skills. Even within a single area of passion, astronomy for example, children can engage all of the processes mentioned above.

Few activities will have all of the characteristics described above. Each offers "players" different developmental benefits. The list that follows provides a starting point for parents searching for "smart" play activities.

Materials published by Free Spirit Publications

Contact for catalogues, prices and ordering: Claude Primeau & Associates, Attn: Lori McLaughlin, c/o Harper Collins, 1995 Markham Rd., Scarborough, Ontario, M1B 5M8, telephone (416) 321-2241, FAX (416) 321-3033.

Bringing Out the Best: A Resource Guide for Parents of Young Gifted Children
By Jacqulyn Saunders with Pamela Espeland

Playing Smart: A Parent's Guide to Enriching, Offbeat Learning Activities for Ages 4-14
By Susan K. Perry

The Gifted Kids Survival Guide: For Ages 10 & Under
By Judy Galbraith

The Gifted Kids Survival Guide: For Ages 11 & Over
By Judy Galbraith

The Gifted Kids Survival Guide II: A Sequel to the Original (for Ages 11-18)
By James Delisle & Judy Galbraith

The Survival Guide for Parents of Gifted Kids: How to Understand, Live with, and Stick Up for Your Gifted Child
By Sally Yahnke Walker

Perfectionism
By Miriam Adderholdt-Elliot

Materials from the National Science Teachers Association

Contact: National Science Teachers Association
1742 Connecticut Avenue, NW
Washington, DC 20009-1171

Flights of Imagination: An Introduction to Aerodynamics
By Wayne Hosking

The Whole Cosmos: Catalog of Science Activities
By Joe Abruscato & Jack Hassard

Materials from Other Publishers

3D Puzzles
By Alan Robbins
Dell Publishing, New York

A Handbook for Parents of Gifted and Talented
By Jeanne L. Delp & Ruth A. Martinson

Amazing Mazes
By Rolf Heimann
Contact: Doubleday Canada Ltd., 105 Bond Street, Toronto, Ontario M5B 1Y3

Anti-Coloring Books (I, II, & III)
By Susan Striker
Contact: Holt, Rinehart & Winston, 383 Madison Avenue, New York, NY 10017

Brain Boosters: Logic, Science, and Math Games for Ages 6 - 12
By Sidney Martin & Dana McMillan
Monday Morning Books, Inc Box 1680, Palo Alto, CA 94302
[Also available: More Brain Boosters, by Dana McMillan and Sidney Martin, same publisher]

A Calendar of Home Activities
Cost: approximately $1. (US)
Available from: Curriculum Associates, Inc., 5 Esquire Road, North Billerica, MA

Eye Cue Puzzles (4 Puzzle games in each set; to develop visual thinking skills)
Dale Seymour Publications, P. O. Box 10888, Palo Alto, CA 94303

Family Math
By Jean Kerr Stenmark, Virginia Thompson & Ruth Cossey
Contact the Lawrence Hall of Science, University of California, Berkeley, CA 94720

Fold Your Own Dinosaurs!
By Campbell Morris
Contact: Angus & Robertson Publishers, Unit 4, Eden Park, 31 Waterloo Road, North Ryde, NSW, Australia 2113

Googolplex
Contact: Arlington-Hews, Inc., Box 23798, Vancouver Airport P. O., Richmond, B.C. V7B 1X9

Human Brain Coloring Book
By M. C. Diamond, A. B. Scheibel & L. M. Elson (Harper & Row, New York)

Invention Book
By Steven Caney (Workman Publishing, New York)

The Mysteries of Harris Burdick
By Chris Van Allsburg
Publisher: Houghton Mifflin, Boston

Parents' Guide to Raising a Gifted Child
By Jim Alvino (Ballantine Books, New York)

Weather Forecasting: A Young Meteorologist's Guide
By Dan Ramsey (TAB Books, Blue Ridge Summit, PA)

Magazines

Zillions (Consumers Reports for Kids) 6 issue subscription $17.95 US, P. O. Box 54861, Boulder, CO, 80322-4861

GAMES, 6 issue subscription $22.97 US, One Games Place, P. O., Box 55481, Boulder, CO 80322-5481.

Lessons Without Limits

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Note: A more extensive version of the comments in this paper can be found in the Fall, 1992 issue of *AGATE, Volume 6, No. 2* (Journal of the Gifted and Talented Education Council of The Alberta Teachers' Association).

When a student approaches a teachers desk and either announces or mumbles, "I'm bored", the unspoken phrase that completes the thought in the minds of both the student and the teacher is, "...and its your fault". In traditional, teacher-centred classrooms, this rang true. If the teacher had assumed control of learning, it was his or her fault, because the teacher was also in control of boredom. Boredom is a cue to the teacher that the limits on learning are too constrained for this student. This is a distinct contrast to the classrooms of today where responsibility for learning is the shared responsibility of the student and teacher. Therefore, today's teacher's response to the student announcing boredom is, "So, what are we going to do about it?" In this workshop, educators were introduced to a systematic approach to "what to do about it" when gifted students are involved.

This system does not depend on test scores or on a student having been "identified" gifted or selected for special programs. Test scores are often necessary for budgets and labelling—not the initiation of appropriate service in the regular classroom.

The system is driven by two pieces of teacher-held information. Teachers can get the first piece of information by watching students to gain a sense of what engages them, what empowers them, what they thrive on, what they care about, their intensity, the source of achievement motivation, etc. This information can be used to guide the selection of the curriculum modification strategies that are likely to engage and benefit a particular bright student to the greatest extent.

Second, the system is driven by that nagging feeling that you aren't doing enough to challenge one or more students in your class, otherwise known as guilt. All under-challenged students in your class may not approach you to announce their feelings, but in the majority of cases, you know. This system offers a guilt-management procedure to determine where to begin to challenge the student and how.

Maker (1982) proposed a procedure to meet this challenge. As mentioned in "Classrooms With Growing Room" (the reading preceding this), Maker's chart and procedure will be adapted for modifications of regular classroom lessons rather than the development of a special curriculum for use in a separate gifted program as originally intended.

In order to apply the procedure in your own classrooms, teachers will need three additional types of information: an observation of the student, the objective of the original, unmodified task, and a basic understanding of the modification strategies. A brief comment on the last of the three is needed. Due to the number and nature of the strategies, they will only be listed here (see Table 1), however, readers are encouraged to refer to the first four chapters of Maker's book, Curriculum Development for the Gifted, for extensive descriptions, examples and the research base on which she founded her recommendations.

The observational data on the student is collected using an abbreviated version of a chart Maker developed to synthesize what we know about how gifted students respond to intellectual challenges, and how teachers can design instructional activities for gifted students who respond in particular ways. The chart is based on the assumption that gifted students differ from each other, and therefore our responses to these differences should be sensitive to the characteristics of the individual learner. Due to copyright restrictions the chart could not be reproduced in this document however it is available on request from Dr. Lannie Kanevsky, Faculty of Education, Simon Fraser University, Burnaby, BC, V5A 1S6.

The observations are guided by shortened items selected from the Scales for Rating the Behavior Characteristics of Superior Students (Renzulli, Smith, White, Callahan, & Hartman, 1976). These appear in a column down the left side of the chart. They are preceded by one column of boxes in which the teacher places a check mark if the neighboring characteristic is true of the student being observed. All observations are made while the student is engaged in a challenging activity in his or her area of greatest strength or interest. Focusing on one area will ultimately provide the teacher with information to guide modifications of tasks in the student's area of greatest need. In addition, it acknowledges the fact that gifted students are not equally "gifted" in all academic areas. Neither do they respond to content from different areas in an identical manner even when they are equally able in a number of areas. As a result, instruction can only be appropriately modified in a manner that reflects the ways that a student behaves in one area when it is based on information that has been collected in a manner consistent with this knowledge.

The second piece of information required to drive the modification process is a clear understanding of the content objective of the lesson the teacher intends, ultimately, to modify. Exactly what is it that the average learner would be expected to know or be able to do, and how well should they be able to do it, at the conclusion of the lesson. This information is critical for two reasons. First, it will be needed to test the quality of the modified lesson once this process is completed. If the modified lesson has the same content, the teacher can defensibly respond to any questions about the appropriateness of this activity from the student's classmates, parents or colleagues. "Why does she get to do _____ when everybody else is doing _____?" If a lesson has been modified in response to the behaviors of the student when working in this content area, the teacher can respond by describing the process used to individualize the coverage of the content (based on the related literature). The chart provides a welcome rationale and defense.

A second advantage of having the same learning outcome in the original and modified lesson is that it enables the teacher to evaluate the lessons, if need be, in the same manner for reporting purposes. If the modified lesson does not have the same outcome embedded in it, then the modified lesson is different, rather than differentiated. This puts the classroom teacher in a relatively less defensible position. The teacher has no evidence that the gifted student has learned the content of the original lesson. Thus there is no guarantee that the student has mastered that content and deserves something different.

Table 1 indicates the four modifiable dimensions of any lesson (content, process, product and learning environment), and lists the modification strategies that might be applied to each dimension of any lesson. Each of these modification strategies heads a column across the top of the chart described earlier. Thus the behavior characteristics run down the left side and the strategies create columns across the page. If a particular strategy is recommended for a child who demonstrates a particular behavior characteristic, an "X" appears in the box created by the intersection of the row containing the characteristic and the column for the strategy. If not, the box is empty. By tallying the number of X's appearing in boxes related to characteristics observed, teachers can calculate (or guesstimate) the proportions of X's in each column that were relevant to that student's behavior. The strategies with the greatest proportions are considered to be the strategies most recommended to modify lessons for this student.

Applying one modification strategy to a lesson is a good start. More than one is optional as other modifications often emerge incidentally as a result of intentionally creating the first. A teacher can feel free to choose from those with the highest

proportions. Once selected, the teacher's creative powers come in to play. It is up to the teacher to generate a modified version of the original lesson that can complete the following sentence:

If I modify __(certain components of the lesson)__ by

__(making the recommended modification)__,

then the bright student will have learned

__(the core content in the unmodified lesson)__ as well as

__(an additional learning benefit resulting from the modification)__.

It is the benefit mentioned in the last blank that indicates the nature of the growth and growing room a teacher expects to result from the modification. This is where the limits on learning expand.

Time is always an issue in any lesson, and it is a particular concern when the original and modified lesson are intended to run concurrently. Both should require the same amount of time to complete. If the modified lesson takes less time, what will the student do to fill the time remaining. If it takes longer, is the more able student being punished with additional work?

Once a modified lesson is created, the teacher may want to consider offering it to all students in the class. In some cases, the entire class will be able to achieve the objective of the unmodified lesson by completing the modified version. Let them! Expand the limits for all. Withholding this opportunity is elitist. If the lesson is too challenging for all, but appropriate for some, let the more able students work as a group. There will also be modified lessons that are inappropriate for any student other than the student of greatest concern and should not be offered to others. There are no precise rules for making this determination. Professional judgement is your best guide.

How often should lessons be modified? As often as possible remembering that it is necessary to manage the learner's needs and the teacher's guilt, but without endangering the teacher's sanity. A teacher has so many competing demands for time and energy these days that the "how often" question is one that needs to be answered by each teacher on an individual basis. Once a week is better than nothing. More often increases the benefits.

Efforts to challenge bright students in the regular classroom can and should be defensible, individually appropriate, and systematic. This procedure can ensure all three. Although a lesson may be appropriately modified, a student may not always

respond as expected. Trial and error is the best approach as a modification may work one day and not the next. Sometimes a teacher's efforts in searching for ways to challenge a student will encourage the bright, bored student to engage even when the lesson does not strike the perfect chord. It may be the willingness to try harder that will be shared by the teacher and the student in their joint efforts to expand the limits on learning.

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